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Lectures
on the Practice of Physic
by

Wm. Cullen M.D.
Professor of Medicine in the
University of Edinburgh. –
delivered in his own House
anno 1768. –

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written by
Benjamin Rush
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Edinburgh.

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The Bark sh.: be given in considerable Quantities in Intermittents. so likewise in Continual Fevers we sh.: give it in larger Quantities than is generally done. Dr. Glass give ℥i of the Extract every day with great Success in the Petechial Fevers. Dr. Pringle I think gave it in too small Quantities in a Jail Fever to do any great Service.

We come now to treat of the Medicines which excite the Arterial System. these are Stimulants.

What are then stimulating medicines? all stimulants are more or less anti-spasmodic. may not their virtues depend upon their antispasmodic qualities? I cannot say Wine. Cantharyna & Serpentaria act in this way. the Contrayerva is of weak virtues. it is generally given w.th other medicines w.ch prevent our knowing its effects. the Serpentaria is a more active medicine. but it is very heating & sometimes upon y.e her.t not very safe. as an antispasmodic it acts only on the nervous system. I know of no medicine that acts anti-

septic on the Fluids.

The <u>Wine</u> is the most powerful stimulus we are acquainted with. it Sh: always be given in pretty large Quantities. It does mischief in all Inflam.y Fevers, & must be given only in the advanced state of Fevers arising from Debility. The Circumstances wh: determine the free use of wine are 1st: the force of Habit if a man has been used to drink a great deal of wine in Health, he must be indulged in it in a Fever.

2nd the Patients Appetites. these sh: always be consulted & gratified. —

3d we th: use it cautiously & give those wines chiefly w: have least Brandy in them such as Claret Portal.

The next medicines to restore the equal action of the Sensorium are

Antispasmodics.

It is difficult to tell how these Operate in any cases, much more in Fevers. we shall first point out a few of them w: are most generally used such as Opium. Camphor Musk & Vol: Salts.

Opium

This Operates as a Sedative & Stimulant - It is hard to restrict their Effects of this

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Medicine. It is so stimulating as to be hurtful in all Inflam.ty Diseases, except merely as a palliative. It should not therefore be admitted in the inflammat.y state of Fevers. but in Fevers attended w.th Debility Opium may be used as a stimulant w.th great advantage. It is seldom used in Fevers. Wine is substituted in its Room for the most part. It does most service by its sedative powers. how then can it be useful in Fevers where y.e sedative powers prevail? In the advanced state of Fevers we often see an imperfect maniacal

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Delirium attended w^th: Spasms &
convulsive Motions wth out any Inflam:
:mation or Determination to the Brain.
in this Case
Opium has been found highly useful
in removing the Irritation w^ch: kept
up the Disease. here the Opium Ope:
-rates only as a Sedative. But if this
is the Case it ought not to be given w^th: the
view of exciting the vigour of ye Sensorium.
- It is designed to remove the Nervous
Spasm & not the Inflammatory. Besides
the Symptoms w^ch: Opium relieves are
Symptomata Causa or Symptomatum
w^ch: do not properly belong to Fever.

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The Sensorium is excited beyond measure at a time when ye Circulation is languid. This we see in Maniacal Patients who have no Symptoms of Fever. There is Something in my Opinion of the Maniacal State combined wth Fever wch gives a Species of Delirium y^t has not yet been attended to. It is in these Cases only that Opium must be given & in pretty large Doses too do y^n: we may depend upon its exerting its sedative powers or we shall do harm. in all those Cases where wine does Service I think Opium w^d answer equally well.

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Camphor & Musk

I have seen ~~Cond~~ both these med given 100 times without doing Good or Service. perhaps the Reason was they were given in too small Doses, or were adulterated. - they Sh^d be given so as to act as Sedative in Order to take off any Irritation from the Sensorium occasioned by the Febrile Spasm or Other Causes: if we expect any Advantage from them we must give them in large Doses.

Volatile Alkali

This has of late been given very largely since its Antiseptic Virtues have been

found out. but Nitre is equally serviceable upon this Acc^t: & sometimes better upon the Acc^t of the Stimulus of ye Alkali. It must be given chiefly in Cases of great Debility.

we come now to ye 3rd thing to p^o: in ye Fun^l Tow^rs

III Indication w^h was to Obviate Putrefaction. this may be subdivided again into 3 Heads. 1st: withdrawing Fomes 2 the Application of Antiseptics. 3rd the Use of Fomes. —

1st: By withdrawing Fomes I mean removing every thing y^t promotes Putrefaction such as 1st Stimuli &

such things as encrease the Heat of ye Body - By 2nd removing all animal Effluvia - & by frequently cooling the Air in his Room & changing his Bed Cloaths. This is of the utmost Consequence more especially in Cases of profuse Sweats wch they rather encrease than check as some have supposed - 3^d By evacuating Bile. This is often the Seat of putrid Ferments, & if suffered to remain in the Alimentary Canal may be absorbed & thus encrease the Disease. by expelling the putrid Ferment by Sweats. Just this Indication in Compliance wch the common Language of Authors for J

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do not think any Ferment wherewith
into y body can be expelled by Sweating
in y manner some suppose.
2nd to Obviate Putrefaction we said
we must apply Antiseptics. these
are, Cold wh: diminish Heat wh: we
know encreases Putrefaction. 2 by
plentiful Dilution. Diffusion we know
renders all Acrimony weaker, especially
in the primæ viæ. 3d by Vegetable Ali-
ment wh: is Sep Alkalescent & tends to
introduce a portion of Acid into y Body.
Acid Drinks answer this purpose admi-
rably 4th by Acids especially ~~those of the~~
Vegetable kind. Fossil Acids are

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likewise highly useful Altho' they never reach the Mass of Blood but act w: the advantage in the primæ Viæ. 5: Neutral Salts. 6: Bitters. Astringents &c.

3rd: Tonic Medicines. I said Putrefaction arose from a Loss of Tone in the Vessels. I would therefore under this Head recommend all the Medicines wch have been ordered to restore the Vires Naturæ. the most powerful of these are Cold & Bark of wch: I have spoke before. this finishes our general Acct: of Fevers we shall next proceed to treat of the Species of Fevers.

As we have said so much on Fevers in general, we shall be very short upon this Subject. There is but One Genus of Intermittents wch are Tertian. 95 Intermit: Fevers out of a 100 are of the tertian kind wch shows us that there is a uniform Tendency in Intermt: Fevers to this type. all other Intermittents appear to be Corruptions of the true Tertian. the Quartan is a Fever of this kind. It often shifts into the Tertian & the Tertian into it again. upon wch Causes this depends has not been explained. as to y Quotidian

Fevers they appear evidently to be dou-
-ble Tertians. the Observations that wd.
establish Quotidians are very doubtful.
Riverius says out of 600 Intermittents
not one an Quotidian. Mercurialis
says yt from 40 years practise he never
saw one of them. Cleghorn & Lenai deny
them having ever seen it, by taking no
notice of it. all Remittents are varieties
of the Intermittents.

We are already sufficiently acquain-
-ted wth the Theory of Intermittents so yt
I shall add nothing but yt Subject.

I go on therefore to speak of yt Usual

Practice in curing Intermittents

This Practice is of two kinds, 1 consisting in such Medicines as are given during ye Fitt & such as are given during the Intermission of the Fever.

The Remedies employd during the Fitt to moderate the Spasm are neutral Salts & Vomits. the neutral Salts used in these Cases are Saline Mixture Sal Armoniac & Sal Digestiv: — the 1st is employed in too small Doses. for the 2nd see Dr Bowies upon it. the Sal Digestiv: is of ye same nature as ye Sal Armoniac. they all tend to shorten the hot Fitt, & to procure longer

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Intermittents. They seldom perform entire Cures alone.

The Emetics are of various kinds. the Vitriol of Copper has been of ~~late~~ lately highly commended. it operates in ye same way as common Emetics. all Emetics may be given during ye cold Fit wth Advantage. I think this is a better practise than to wait till Nature brings on a Vomiting or a Sweat. they do most service when given so as to excite a simple Nausea as they then generally purge a little. But in Cases of an Effusion of Bile into ye Alimentary Canal

a Vomit should be given.

Some join Cathartics w.th y.e Emetics in Intermitting Fevers. hence most of our Fever Medicines have something purgative united w.th them. I think Preparations of ☿ ought be combined w.th Antimony I have used it w.th ☿ Emetic w.th great Advantage in the Beginning of Fevers. - all Emetics act in y.e same way as y.e Neutral Salts viz: by Moderating the Fits & prolonging the Intermission. they sometimes cure Intermittents but generally something else is required.

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not succeed the hot Fitt? the saline mixture sometimes produces this sweat. it is a more useful Medicine for this purpose than Sp.t Mindereri. if it th.e fail we must have Recourse to ℞ Emettic.

For an Acc.t of the Regimen in Intermittents see Fever.

2.nd we come now to treat of y.e Remedies used during the Intermission.

These act by removing the Atonia of the System. it is done by exciting a hot Fitt before the usual time it comes on, by Neutral Salts - by Emettics 3.rd by putting the Patient to Bed, and

exciting a Sweat by hot Drinks. this is the most efficacious & successful Method of promoting a hot Fitt when used wth proper Caution. by 4th Cold-Bathing. Dr. Morgan tells us that he has used it wth very great Success. by 5th Riding a Horse Back so as to excite a Sweat or ye Vigour of ye Sensorium. But there is a Danger here of bringing on too violent a hot Fitt. 6th by the use of direct Stimuli such as Pepper Nutmeg &c. there is more Danger in using these as they tend to bring on ye Inflam^n: Diarrhœa & all ye Inconveniences of an Excess of hot Fitt. It is therefore universally rejected by Practitioners. all these Remedies are

but temporary & altho' they break into the Habit of Intermittents yet they do not destroy this Habit. 7 Stimulat. Passions of the mind. —

2: let us ~~look~~ speak of ye internal Remedies nec to restore the Tone of the System. these are 1: Astringents 2: Bitters ord: a Medicine wch has both these Qualities united in it viz: ye Peruvian Bark.

Upon the first Approach of Intermittents generally order a vomit as ye prima via mostly abound wth vitiated Bile wch often contains the Fomes of the Disease. — the Belly ought next be opened to retire off the Spasm wch from ye increased

Determination of Blood to ye Belly are for ye most part Obstructed by a Spasm. Sh: we suffer Intermitting Fevers to run on any time? Experience does not determine this Question. the Repetition of hot Fits some days sometimes restores the System to its proper Tone. When the Inflam^y Diathesis prevails it may be useful. in hot Climates we must never trust to Nature for y^e Paroxysms are sometimes so severe as to kill on their first Attack. Neutral Salts therefore and Bark sh^d be given as soon as possible.

Our chief Dependance must be placed upon this last Medicine. we shall

add a few things concerning the man=
=ner of exhibiting it. Many Controversies
have been agitatated concerning
it. Physicians a few years ago were
strangly prejudiced ag:st it upon y^e^ acc:
of its resisting so much to y^e^ Efforts of
Nature in the Cure of Intermittents.
But this is a wrong practise. I know of
no Salutary Effects th^at^ ws: Intermt^s^ have.
all that has been said in their Favor
has been founded on a few Facts that
by no means admit of such
Inferences from them. Van Swieten says
they are wholsome by improving
ye vasium vitæ Genus, but I deny it.

much has been said too agn. ye Peruvian Bark as checking Intermitting Fevers too soon or as having deleterious Effects but we have no proofs of either of these suppositions being true. I know of no Arguments to persuade us to let the Disease continue. Some Circumstances I grant render the Bark less proper such as 1st the Presence of Inflamt. Diathesis especially when attended wth. topical Affections. 2nd the want of regular Intermissions. the Bark in this Case does Mischief. 3rd the Presence of Obstructions or Congestions especially in the

Abdominal viscera. if it is given in this Case Evacuations ought be premised to resolve these Congestions & to carry off Bile. – all these 3 Cases ought to forbid the use of Bark occur chiefly in cold & Northern Climates. the Intermittents in such Countries are less dangerous & we may better suspend the use of the Bark. but in hot Climates where the Sedative powers so much prevail the Bark must be sooner exhibited even where little or no Remissions appear see Dr Cleghorn upon this practice. in very putrid & Sedative Intermittents we may give the Bark when less

or no Intermission appears at all. $\frac{c}{y}$ great Want of Tone in the Arteries renders this Practice indispensably necessary. How is the Bark to be administered? — a small Quantity of it is not sufficient to check Intermittents or to restore the Tone of the Arteries. ℥vj or ℥j is always absolutely necessary. in some Cases more. this Quantity must be given at a particular time or it will not produce its Effects. the nearer to the time of the Paroxysm are give it the more efficacious it proves. ℥ij given just before the Fit does more Service than ℥j given thro the Course of 24 hours without any Regard to the time of the Fits coming on

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The Effects of the Bark are not durable. — a Quantity sufficient to obviate one Fit will not always cure an Intermittent entirely. we may say the same of all Medicines as well as the Bark. the Effects of few of them are durable wh. makes it so very necessary to give Neutral Salts & all the Fever Medicines just before the Approach of the Exacerbation of Fevers. — Some Doses of Bark therefore are necessary to prevent the Recurrence of Intermittents. when one Paroxysm is broke we must still give the Bark just before the usual time of the Fits' coming

on. After this we may intermit a day, then give a few Doses & intermit two Days, & so continue to a 4th Day's Intermission. perhaps this will not be sufficient in marshy Countries where the Cause still continues.

If the Bark purges it does no Good. the Purging takes off the Force of the System as fast as the Bark restores it.

Opium therefore must be joined with Bark when it proves purging. This leads me to speak of the use of Opium in Intermittents. It was much used among the Ancients. a late Writer in France has revived its use. ~~[illegible]~~

Does it act by obviating the Spasm wch. occurs in each paroxysm? I cannot admit this. It appears to act by obviating the Atonia on wch. the Spasm depends. in wn. manner I cannot tell, for it seems to act as a Sedative as well as a Stimulus. May it not take off the Excitement of the Sensorium & prevent the accumulation of the Nervous Fluid in such a manner as to produce such a Degree of Density in it as to promote & recover the Tone of the System? This is but a Conjecture & is foreign to our present subject.

we come to treat of the 2.nd Order of the Pyrexia viz: the Phlegmasia

I shall 1.st consider its Nature & show its Distinction from ye Febres 2.nd: treat of its Theory & afterwards speak of its Cure as applicable to Genera & Species.

Phlegmasia is distinguished from Fever by topical or primary affection. they are distinguished from Profluvia by no Evacuation & from ye Exanthemata by no Eruption, but of this we shall say more hereafter.

When this topical affection takes place we perceive Heat - Redness Tumor & pain in the part. When

it is internal these marks are not evident. the Character of inflammation is Pyrexia cum Dolore topico primario, pulsu duro & sanguinis emissa Crusta coriacea. this applies to all Cases of Phlegmasia in general.

The Theory of Phlegmasia is very difficult. in every Phlegmasia we perceive an increased action of the Arteries of the part inflamed some times two of the Heart & Arterial System in general. in this it agrees w: the Fevers. but it is brought on difficultly & differs in its Symptoms. 1 in being confined to one spot only 2nd It is induced by external stimuli which act chiefly on the part to wh: they are

applied. But Inflammn: is not always brot on by stimuli externally applied. Simple Congestion will bring it on. the Rheumatism depends on previous Congestion — these Congestions excite the Reaction of the Sensorium & thus bring on the Phenomena of Pyrexia. The Angina in like manner depends upon Congestion brot on by Cold stricturing the Vessels. In all Cases of Inflammation then I presume Congestion to be present wh: produces a Molestia wh: the Sensorium exerts itself to remove. this Reaction of the Sensorium is attended wth: a cold Fitt & the Formation of Spasm. It is

in Consequence only of this that the increased Impetus of the Blood and in this Action of the Heart is formed. ~~the~~ for Phlegmasia & Febres agree, but they differ in the Phlegm: being accompanied w: th a Phlogistic Diathesis depending upon an increased Force of the Arteries. this we prove from q: Causes inducing it w: ch are Stimuli & Cold. these we know increase the Tone of Muscular Fibres. the hard Pulse ~~Hard~~ likewise shows an increased Tension of the Arteries & can depend on no Other Cause. the Phaenomena

of the Blood show this to be Case. the Infusion of the Coagulable Lymph always attends Inflammation & is sometimes produced by the Phlogistic Diathesis. these Circumstances chiefly distinguish Phlegmasia from Febres. the Spasm in the Phlegmasia is more permanent than in the Febres. It is surprising that Nature shd suffer the Spasm to continue too long when ye only Design she has in view in it is to excite a hot Fitt to remove the Congestion or Stimulus. But the Operations of Nature are not always proportioned to ye End she has in view. Phlegmasia then

is attended w: the topical Phaenomena & increased Impetus. this produces increased Heat - Tension - Tumor. & Pain. where is the Pain seated? we often see it in parts which have little or no sensibility during Health. many solutions of this Phaenomenon have been offered. as the Fibres of the Body are originally composed of nervous Fibrils w: are surrounded w: cellular Membrane. this is the Case w: the Tendons. in this Case they are incapable of ~~sensa~~ Excitement by but by an increased Degree of Heat & Tension they acquire Excitement & Sensibility. Another Solution appears

equally probable. the Arteries may all have nervous Fibres wch, during Health have little sensibility when out thro'. we have some late Experiments wch show us yt the Arteries are possessed of muscular Fibres & consequently of Irritability & sensibility. - by increased Heat then & Tension we can easily account for yt Pain. this is the most satisfying Acct of the Cause of the Pain. the Pulse becomes full in Inflamation as Inspiration advances wch depends upon Effusions. before this takes place yt Pulse is generally Hard & is known by wch is called the Sink in it.

How do stimuli produce Inflammation? — by acting directly or by producing Spasm; or by both? — bringing on Congestion & then 2nd: Spasm? I think the last supposition most probable. — This is the general Theory of Inflammation. It is I grant attended w: the Difficulties but it is more probable than Dr: Boerhaave & Bellini's who suppose that it depends upon Lentor; Obstructing the small vessels. But we have no proofs of this Lentor, nor are the Causes & Effects of it any ways proportioned to each other. — The Coagulable Lymph which was supposed to be Lentor is a

natural part of the Blood, & is the Effect not the Cause of Inflam^n. - nor could such a Cause if it existed produce Inflamm^n. the Arteries are capable of such Distention as to pour out red Blood without any Appearances of Inflammat^n. nor can^y. Inter Loci produce it as this is Obviated by the Incrustating of the Vessels. See this Doc. time more fully overthrown by Dr. Haller & Mr. Lauvergne who have proved that Obstruction of hollow Vessels does not produce increased Impetus. the Obstruction from Spasm is part of ye Consequence of Inflamm^n. It is seated in ye Solids not

in the Fluids when Bellini placed it.

— The chief Effect of increased Impetus is to produce Effusions in different parts. — this is well known to every One & is seen externally & internally after Inflammation has continued for some time. the Vessels internally are always pouring forth a Halitus. if a part is inflamed in the cellular Texture this Halitus is poured out in an increased Quantity. this is proved from ye Production of Pus. Dr Pringle & Dr Gaber have made Pus from ye Serum of the Blood. Pus then is derived from Serum effused into the cellular Membrane. the Ordinary

Habitus is incapable of being converted into Pus. this we prove from ye Fluid in Dropsies not being changed into purulent matter. there may be Effusions in like manner in Inflammat^n: in w^h: no Pus is formed. the Habitus is Absorbed & the Vessels return again to their usual State. the Formation of Pus is connected w^th: a certain Degree of Inflammation

We prove Effusions to take place 1st from ye Structure of the Arteries w^ch: terminate in exhaling Vessels.
2^d from the Size of Tumors.
3^d from the Colour of the Matter contained

in them. this is most evident in ye small pox and in all Eruptions where the Matter is contained in ye Cuticle. 4th from the Exudations of effused Matter on the Surface of internal Viscera when inflamed. but ye most convincing proof of Effusions is 5th from ye Formation of Pus which is formed from a particular part of the Blood. Pus can never exist without Effusions. Dr. Klein imagine it may, & supposes that it may be found out already formed from ye vessels.

The Event of Inflammn: depends upon ye nature of ye Fluid effused & ye Changes

it undergoes.

Let us first enquire into ye Event of Inflammation. I shall here mention Gaber's Experiments. He found Serum could be converted into Pus out of ye Body. only 1/3 of the Serum however was converted into Pus wch fell to ye Bottom of his Vessel & left a transpart Liquor Above. He found yt it was Coagulable Lymph chiefly yt was changed into Pus, from wch I conclude that Serum will be more or less disposed to ye purulent Fermentation in proportion to the

Quantity of coagulable Lymph it contains. I infer this from this ye ye ordinary Habitus contain^d nothing but dissolved Lymph. when it is only diffused it, it seperate from it & is thus easily changed into Pus. the Reason why the Effusions in Dropsy are so seldom changed into Pus is owing to ye Lymph not seperating from ye Serum. Pus then in Consequence of Inflamm^n depends upon ye encreased Impetus pushing coagulable Lymph along wth Serum into Cavities.

2nd: Mr Geber found Serum when seperated from the Blood was differently

disposed to be converted into Pus w^h^ he attributed to a peculiar Dyscrasia of the Blood at different times & in different Persons. from ye Mixture of Bile Oil &c with Serum he found the purulent Fermentation much diversified but he dont tell us in w^h^ Manner. 3^d^ He found the whole Mass of Blood when digested together never formed Pus, but became immediately putrid. 4th He found ye Purulent Fermentation produced no great Change upon ye Lymph - it produced a Slight Ferment only, but it never changed its Qualities wth Regard to its Relation to Fluids. its coagulatedly

them, but never effervesced the w: them.
— But still he supposes ye purulent
Fermentat: is a Tendency towards the
putrid & may be induced by a grea-
ter Degree of Heat or by mere Length of
time insomuch that it will give a vol:
Caustic Alkali & lose its coagulable qua-
lities. It were to be wished that he had tried
whether putrid Serum would in like
manner have carried on ye purulent
to the putrid Fermentation. Such
putrid Ferments are introduced into the
Body, as in the Plague and in many
kind of Ulcers such as Venereal-Cancer
&c. But the State of the Blood being

given, the Effusions will be varied by ye Tension or laxity of the vessels or by the Ratio they bear to ye Impetus of the Blood. we cannot speak wth Certainty here as we are so ignorant of ye nature of Fermentation. One Effect we can point out. a great Degree of Laxity produces peculiar Effects of w^ch: we shall say more hereafter. Fermentation begins wth ye Extrication of Air from a fixed to an elastic State. the more the Fluid to be fermented is compressed the slower ye Fermentation goes on. Faber found ye purulent Fermentation attended wth ye Generation of Air. But upon covering some Serum

[a] the state of the Blood and the Surfaces being given the Formation of Pus will be varied by the Degree of Heat, & by the nature of the Ferment acting upon the effused Fluids.

w: Oil he found y Poikoiesis wanton slower. he filled some vessels w serum & sealed them hermetically the Consequence of this was y: y pursuit: Fermentation went on slower still.

now effused Fluids will be converted into Pus in proportion to y capacity of the vessels they are contained in, in favouring more or less y Extrication of air. ia,

Effusions will be varied by Absorption. if the effused Fluid is only Halitus no stagnation will ensue & it will be again absorbed. if the Halitus contains a strong Impregnation of Lymph or has

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it only differed, it will be changed into Pus. the thinner parts are generally absorbed while the Pus is forming. the Habitus may influence the formation of Pus considerably either in quickening it, or meliorating its qualities. the Absorbents sometimes cease to act from an Atonia. they are irritable and contractile vessels in a healthy state. a loss of their Tone stops Absorption, & thus conduces towards the Formation of Pus. these are the chief Circumstances which determine the nature of Effusions.

I shall now speak of the Phenomena which take place in Inflammation.

- In moderate Inflatus there is no Effusion but Halitus containing little or no Lymph. this Fluid is easily absorbed and the Inflamⁿ: is resolved. this is one of the Terminations of Inflammation.
- the greater or lesser Degree of Tension or Laxity likewise conduces to vary the Absorption of this Halitus. the Cellular Texture is of different Degrees of Firmness or Laxity and from this is more or less easily dilated. the more lax the Vessels, the more frequent the Effusions - hence ye Reason why Suppurations happen chiefly in cellular Membrane of a loose soft Texture.

Dr Cleghorn found in $\frac{2}{3}$ bodies $\frac{2}{3}$: he dissected that died of Tetanus $\frac{2}{3}$ Omentum & adipose parts generally filled $\frac{4}{5}$: purulent matter while in more solid parts he found no appearances of Pus. all observations concur in fixing Abscesses in adipose Membranes, hence we find them most frequently under the Skin.

– Inflamm.n in the Tendons never ends in suppuration. the Reason of this is owing to their Fibres not being connected with loose cellular Texture. Inflamm.n is mostly seated in common Membrane such as the Joints - Pleura - Meninges of the Brain & the Parenchymatous Inflam.

-mations are of a different nature from these as we shall say hereafter. The Event of Inflammn: in these thin Membranes is greatly varied by their Contiguity to bar parts. The Meninges of the Brain never terminate in Suppuration except when an Inflammn: in it arises from a Wound or Contusion. The Pleura & Peritoneum oftnest end in Suppuration from ye Vicinity of the 1st w: the Lungs & the 2nd w: the Bowels.

Suppuration occurs 1st in Cases where the Vessels are wounded 2d w: is owing to increased Imbibition & laxity both

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being indured. 2nd Suppuration takes place in sound vessels when ye Arteries is strong enough to pour out suppurating Matter 3rd: It occurs when ye exhalents open into lax parts. 4th: It occurs when nothing but Serum is poured out, if red Globules are poured out no suppuration can be formed. 5th: an increased Degree of Heat is necessary for Suppuration. 6th Absorption is necessary for Suppuration, to carry off the pure Serum 7th: retards the Formation of Pus from the Lymph. all these Circumstances are capable of great

variation, & on this may depend the different nature of Fluids found in Tumors & Abscesses. ~~I do~~ But I leave this subject to be prosecuted more fully by yourselves. —

On w: does Gangrene depend?

It will occur 1st: when ye Impetus of the Blood is so great as to pour out putrescent Matter. This happens generally when the Blood is dissolved — the red Globules adhere to ye coagulable Lymph ordinarily in such a manner as to prevent their being effused.

2nd: When the Tone of the Arteries is

so weakened as to admit of great Effusions. both these Circumstances often occur together. 3.rd When the Laxity of the Vessels is so very great as to admit of the Extrication of Air Putrefaction will be greatly increased 4.th When the Blood is tainted w.th a putrid Ferment 5.th When the Absorbents are affected w.th an Atonia 6.th When a putrefactive Degree of Heat takes place in any part. all these Circumstances forward the Putrefaction of our Fluids.

The Atonia of the Arteries joined

4th w: encreased Impetus are sufficient to bring on Gangrene without ~~out~~ any Fer: ment whatever. Pain itself without Other Causes is sufficient to induce this Atonia.

Does ye encreased Impetus destroy the texture of the part inflamed? I shall not determine this Question.

Schirrus is another Termination of Inflammation. on w: does it de: pend? I shall not say, but leave it to your Ingenuity to enquire into. I shall speak of some Other Termination of Inflamation hereafter.

I shall now treat of the Genera & Species of Phlegmasia. they are either

External or Internal. I shall distin-
guish them by the Organs they affect.
- the Internal are divided into Phleg-
mon & Erisipelas.

Phlegmon is attended th w: an elevated
circumscribed Circular Tumor th w: is of
a clear putty intense Redness th w: is per-
manent & dont disappear by pressure. joined
to this there is a Tenseness - smoothness &
Splendor of the Skin. - a stinging
pulsatory pain. it ends in suppuration
or Colections of Matter th w: lie immediately
under the Skin

Erisepelas is attended th w: little Tumor

Tumor or Elevation of the parts. It is not circumscribed but extends irregularly. the Redness is bright & has paleness intermixed w: it, & fades off by Pressure for a time. Some deep Yellowness is mixed w: the Redness. I can't say I ever saw it altho' it may be Rare. It has likewise Splendor - is covered w: the Moisture - is attended w: little Pain or Pulsation - is known by Heat & Smarting. It does not end in Suppuration but terminates in watery Blisters.

The Phlegmon is seated in the Larger Vessels under the Skin & hence

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it is attended wth all the symptoms we have mentioned. It depends on previous Congestion wch is confined to particular vessels.

The Vesicles is an affection of slender vessels wch communicate only wth the Mucous wch is internal between the cellular texture & the Cuticle. It is produced by acid matters applied externally or by acid matters effused under the Cuticle. from this you will easily understand the Reason of all ye symptoms we have mentioned as belonging to it. — But we often see both

both these kinds of Inflammn: combined in producing the Erisipelas — Phlegmonides. the Symptoms here are confounded. there are ye only Difficulties w^ch: can be ans^d on Subject. the Ophthalmia cannot be reduced to either of these Heads. It is a Phlegmon sui Generis. It approaches nearest to the Phlegmon in depending upon Congestion w^ch: we said was characteristic of Phlegmon. the Parotis & Bubo are a Genus of Phlegmasia different from the common Phlegmon. — the Arthritis (by w^ch: I understand the Rheumatism & Gout) differ likewise from the Phlegmon in ye manner we formerly said

From w^t has been said you will see ye Absurdity of Dr Boerhaave's Doctrine who divides Inflamm:^n from the size of the vessels it affects. he places Phlegmon in the red vessel & Erisipelas in a smaller order of vessel. But we can conceive of no such thing. It is impossible for one sett of these vessels to be affected without the other, or if they are it will give a Difference in the Degree & not ye kind in Inflammation. He talks too of the Oedema Callidum, but I know of no such thing. there is w: Authors call ye Oedema Frigidum. but this differs widely from Phlegmon. —

I come now to internal Inflammations. these must be divided into different genera from ye nature of ye Organs they affect. some divide them from their nature into Phlegmon & Erisipelas. but no internal Erisipelas can take place according to ye History we have given of it. Effusions may be made into ye Lamellæ of certain Membranes but these are widely different from ye Eruptions we see on the Skin. Dr Lommius talks of an Erisipelas of the Lungs, & endeavours to prove it by its being cured by an Erisipelas breaking out on

on the Skin. But this is a solitary Fact & we may therefore refuse it upon the whole I deny the existence of internal Erisipelas except it be in the Alimentary Canal which we know is exposed to the action of Acids. It is besides covered with a Skin or Epidermis somewhat analagous to the Cuticle which is the usual seat of Erisipelas. But even supposing Erisipelas did take place internally we know of no Marks that will indicate it to us.

Is there any Foundation for the Membranous & parenchymatous Division

of Inflamm.? Sauvage has introduced it. there is a supposition wh. points out a Distinction between them, but it is hard to find it out, or to tell wh. parts are Membranac. or Parenchymat. Sauvage has run into some Errors on this subject. Further they may both be blam at once. I know of no marks y. distinguish the Phrenitis from the Cephalitis one of wh is an affection of the membranac the Other of q. Parenchym. substance of the Brain. In q. Uterus Membran. or parenchym. Authors disagree About it, & no external symptoms

are able to tell. But even supposing we were capable of distinguishg. them w: Ind w: it answer? for I am apt to imagine that the Parenchym: Inflammn. always proceed from y: Membranaceous. if it does take place alone its symptoms Cure must be different from w we imagine. it soon terminates in Abscess without any pain, wh: Abscess by becoming liquid may stimulate the Membran: around it, & thus induce Inflammation. —

There are two general Causes of Inflammation viz: One depend.^g on Congestion the Other upon Stimuli. the Inflammations from the 1st Cause fall more immediately under our Notice, we shall therefore discuss it particularly. The general Indication in Cure of Inflammat.^n is to remove the Spasm w.^h we said ~~ac~~ ~~d~~ucced the Congestion. the Removal of this leads us to a 2.nd Indication viz: to take off the Inflam.^y Diathesis w.^h is done by removing all Irritation

& by the Antiphlogistic Regimen in general wch you are now acquainted w^th:
. the only Remedy to be thrown off is the use of Cold w^ch: sh^d: be applied in a moderate Degree so as to lessen the Stimulus arising from Heat. how far may Cold may be applied? we said Cold induced the Inflam^n: Diathesis. how does it remove it in the Small Pox? This is a difficult Question, & may seem to embarrass our System a little. I leave ye Solution of it to your own Ingenuity.
a principal Remedy in the Cure of Inflam^n: is Blood-Letting. It

Operates only by taking off Tension. this, the advantage of a large Orifice & of bleeding at Deliqui.m hominis sufficiently prove. the Doctrines of Derivation & Revulsion are now exploded. the Effects of Blood-Letting show us that Inflamn.n depends upon an increased Force of the Arteries. this is reasoning in a Circle but is nevertheless true as both propositions can be proved separately. How great must the Quantity of Blood drawn be? It is hard to reduce this Question to any Principles. we must always

be influenc^d by the vigour of ye System the Violence of the Symptoms and the Nature of the Organ affected Viz may be taken away in certain Cases wth Safety & advantage. - When is Bloodletting unsafe? no Rule can be established. we have seen it do Good on ye 2^d day of Pleuri-sies if Blood has been let on the first three or four days without Advantage - But in all such Cases Jourbert Effusions of red Blood especially in Peripneu-mon^y ~~[illegible]~~. However no Harm can arise from Attempting it in small Quantities,

Unless we see Nature busy in performing a Cure by a plentiful Expectoration or by Other Means when Other Organs are affected. if this th: be the Case Blood Lett: will be attended wth: great Danger. I am no Friend to excessive Blooding.

I have seen two or three Hydropsies Rectoris arise from it. Blood-letting certainly favours ye drawing off of red Globules wch: always disposes to Dropsies.

Topical Evacuations are much safer & more Efficacious than

general bleeding as it acts immediately on the seat of inflamm.n removes the Tension & Spasm of the part affected. Cupping Glasses are the best as they draw off both a sufficient & determined Quantity of Blood.

The Tension of the part affected may be relieved by Blisters and all the Rubefacientia. Thus in the Rheumatism the pain is excessive when the Inflamm.n is confined to y.e Tendons but when Effusions are indeed the Tension of y.e bepels u.n w.h were primarily affected is taken

off. now Blisters are very useful in promoting these effusions. I infer it from this, y^t Blisters act chiefly as Topical Evacuants w^ch: th^y induce us to apply them as near as possible to the seat of Inflamm^n: as well to evacuate more as to prevent amplificatory effects from them. Cantharides are useful mostly for Blisters but other Acrids will answer full as well. Dr Stoll found a Ranunculus very useful in the Rheumatism. I have often found Mustard when applied pretty strong bring on a Blister at

Once. we must diffuse it a good deal to obviate upon its stimulus - it operates very suddenly & never produces strangury.

It is of no importance to keep a blister running. the sooner an incarceration is made the better. but when inflam.n is confined to one spot we must keep the discharge open for some time, as fresh blisters cannot be applied. the acrids such as mustard seed &c th.e always be preferred to the Cantharides when we want to ~~do~~ keep a blister running for some time, as they are less apt to

heal soon.

Warm Bathing has been found very useful in taking off Inflam^n. It acts chiefly on the Cuticle upon the numerous Extremities of ye nerves wch terminate under it, & by this means takes off the Tension from the whole System. But is not ye Heat hurtful by irritating the System & thus increasing the Inflam^y Diathesis? Dr. Winstringham found it hurtful in the Rheumatism. It never ought be used 'till Bleeding has been premised or 'till late in the Disease. I have seen it do Harm in Phlegmonæ.

It is common to impregnate Baths th w: Medicinal Herbs. But I doubt whether they communicate any virtue to the water. they are generally Aromatic Matter, & if they have any virtue it is of the Antispasmodic kind, but they are never applied in large enough Quantities to do any service. the warm water alone does all the service we could wish for.

Are there any Antispasmodic applications? Camphor has been considered as One. It is a powerful Sedative, & its Effluvia may penetrate very deep, but notwithstand.g I never

saw any Antispasmodic Effects from it in the Inflam.ⁿ: Spasm. In the Rheumatism it gives Ease as a Sedative & not as an Antispasmod.: - the bol. ppᵗ w.ᵗʰ Oil does ~~all~~ every thing we could wish for from Camph.ᵉ:

Is Opium useful in Inflammations? It brings on an Atonia w.ᶜʰ lays the Foundation for Gangrene w.ᶜʰ makes it a doubtful Medicine before it brings on ye: Atonia it acts as a tonic & aggravates all the Symptoms. It changes Acute into Chronic Rheumatisms. -

Refrigerant & Astringent Medicines have been employed externally with a good deal of success. the Sacchar: Saturnii has been much used for this purpose. the too free use of them may favour Gangrene - they shd be used therefore very cautiously

Internal Medicines.

These are Diluents & explain the Operation of these before. when given warm they are powerful in resolving Inflammation. Inflamm: encreases the Sensibility of the whole System

to Cold, so that warmer Drinks than usual are necessary. we know from Experience that they do relax the Nervous System. this, Tea Drinkers can witness.

Are the nauseating Emetics useful in Inflammat.y Diseases? if they excite the extreme Vessels they ought to encrease the Impetus & Inflammat.n: so that à priori we are led to condemn them. But Dr Pringle has lately found them very useful in Cases of Inflamm.n, & I think I have seen them used th. w. Advantage. they restore a Determinat.n to y. Surface & lessen the Fever th. attends Inflam.n

so that I w^d recommend them to y^r trial.

May Opiates be used internally? I have always found them hurtful. they increase the phlogistic Diathesis by their tonic power especially when given in small Doses. there are some Cases in w^h the Irritation from pain or Cough render them necessary under some Restrictions of w^h we shall say more hereafter.

as to Suppuration & Gangrene I have nothing new to say. I refer you to practical Authors for a History of them.

Suppuration is an Operation of nature

however much we may talk of Suppurat.d Medicines, Galban.m Fig, Onions &c have no Efficacy except it be by promoting the Heat and Laxity of the part, & Bread & Milk will answer both their Intentions.

This finishes the general Cure of Inflammation. I shall now speak of the particular Phlegmasia & begin w.th the internal Ones. I shall confine myself only to their Diagnosis & Cure, as I have nothing new to add upon their Histories.

– I shall begin w.th the Head & proceed downwards.

This is either Membranaceous or Parenchymatous. but the Symptoms do not admit of our distinguishing them. the slow Respiration seems rather to indicate the Parenchymatous than the Membranaceous; but this Observation wants more Facts than I have seen to confirm it.

They are seldom Idiopathic except when they arise from external Incidents such as Inoculation wounds, Contusions &c. Phrenetic affections are generally Symptomatic when Idiopathic I believe they

are seldom to be cured. there may be a Maniac: state independent of an increased Impetus of the Blood. - Phrenetic Affections are generally connected wth Fever especially in those in wch the sedative or stimulant proven greatly prevail. w^t is to be done in these Cases? are we to attend to the Fever or the Inflammn^n of the Brain? we must compound Matters. in the Beginning of them we may bled, but after the Disease is a little advanced Bleeding is hurtful. this finishes all that I had to say on ye Phrenetis.

Ophthalmia

This is a topical Disease & is seldom attended w.th Fever. General Bleeding therefore does no service in it. topical Bleeding alone must be ordered here.

There is no Effusion in Ophthalmia but a simple Accumulation. hence the Application of Astringents is safe chiefly in these kinds of Inflamm.n especially after proper Evacuation have been used.

But Ophthalmia is not always a topical Affection. It is often

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see River: p: 226

also p: 389.

connected wth the Stomach & lower Extremities, but more especially wth the first. I have seen many Instances of a remarkable Connection between the Eyes & Stomach in a great Number of Patients. I shall explain the Theory of this hereafter. in these Cases of Opthalmia we must pay great Attention to the State of ye Stomach. ie.

Opthalmias are often Intermitting & are to be cured Only by the Bark. the Opthalmia may appear to be constant but has nevertheless

regular Exacerbations & Remissions wch may be discovered by close Attention to them for some time. the Urine sometimes indicates them by depositing a sediment.

The last Observation I have to make on ye Ophthalmia is yt it sometimes depends on Acrimony deposited on the Ciliary or mucous Glands wch excite an Inflammation in the Eyes. these are not always of ye scrophulous kind. they are to be cured by Medicines that Operate on ye whole System. Evacuations are hurtful. the

salt water & Wash are ye only
Medicines in ye Scrophulous Opthalmia
to be depended on. ~~If~~
~~the Cause fail~~ But Recourse must
be had to Mercurials & gentle
salivations, ~~[illegible]~~ When
the Opthalmia arises from ye Cause
we have been speaking off. —

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Sauvage has employed y: Term to every Case of difficult Deglutition or Respiration but this is very improper. By Angina I mean an Inflamm.n of the Fauces. the most ordinary Case is Cold constricting the Fauces externally determines the Fluids to flow more copiously to y: internally Fauces. Angina's Peripneumony & Rheumatism constitute 19 out of 20 of the Inflamm.y Diseases. this arises from these parts being most exposed to Cold w.h we know induces Congestion & all the Symptoms of Inflammation

The internal Membrane of ye Fauces is a Mucous Membrane. this Mucus is a vehicle of Acrimony more especially of obstructed Perspiration. When this is effused it natur^ly encreases Irritation & Inflammation the Effects of this Inflamm^n appear chiefly in the Congeries of Vessels in the Tonsils. & of this I shall treat more particularly. It has received diffi-nitthames from the different Degrees in wch it affects the Fauces. It generally extends to the Larynx or Pharynx & sometimes affects the Muscles of De-

glutition. all these Affections con-
stitute but different Degrees of the
same Disease.

I said the mucus of the Glands of y^e
Fauces was the ~~food~~ vehicle of Acri-
mony. this we have many proofs of.
all Exanthematous Fevers affect these
Glands. the Diarrhoea wch attends Ex-
anthema depend on Acrimony determi-
ned to the Mucous Glands of ye Guts.
But Acrimony is more disposed to pass
to this ye Glands of ye Throat. now as
these are more exposed to Cold than
ye Bowels we must not be surprised
that its Discharge is often checked here

by which means the Angina is brot on.

There may be a Specific Contagion affecting the Fauces w:ch gives Rise to ye putrid Sore Throat. Dr. Huxham & Dr. Fothergill have treated it in a very full & accurate Manner. I have nothing new to add upon it. — It is to be cured by Peruvian Bark. Bleeding proves prejudicial in it.

It is of the greatest importance to distinguish ye Malignant Sore Throat from ye Inflammatory. they are often confounded together. ye Inflam:d Angina sometimes proves Gangrenous

as well as the Malignant. See Dr. Huxham upon this. I have seen an Angina epidemic here wh: was attended wth Exanthemata that never terminated in Gangrene. The best Symptoms to distinguish the Inflamm: Angina from ye Malignant are 1st considerable Tumor - 2nd full pulse & 3rd all ye usual Marks of Inflammat:. In the Malign: Angina there is 1st little Tumor 2 weak pulse & 3 great Prostration of Strength - when these Symptoms are complicated wth any of the Inflamm: Symptoms Bleeding may be used wth Advantage. 4th Children are more subject to the

Malignant than the Inflam.y: Ad. vice versa. 5.: Sloughs attend the Gangrenous Angina, but every Appearance of it shd. not indicate the Malignant Angina to be present. I have seen Aphthous White Specks on the Tonsils Often in y.e purely Inflam.y Angina & have Ordered Bleeding in such Cases w.th great Advantage — Aphtha may happen in any Affection of the Mucous Glands. It attends all the Exanthemata more especially the Small pox. Sloughs then I maintain alone are no proofs of y.e Gangrenous Angina, Unlss they appear very soon

" O Fiume, o Colli o Rive
" Quanto Invidia vi porto
" O verdi Lauri, o pallidette Olive
" Del mio dolce diporto
" Voi vi godete, ed io sospiro a torto.

— Vid: Fasso vol: 2: p: 123

L. J. L. Aug: 3.zo 1768.

- have a livid Appearance and are connected w: the all ye other malig: nant symptoms we before spoke off.

I have nothing new to add upon the Cure of the Inflam^n: Angina. You will find it amply treated off in all practical Writers.

The Inflamat: Affections of the Lungs are of more Importance. they have 3 different seats 1: in ye mucous membranes of ye Bronchia 2: in the Parenchym: or cellular substance of the Lungs 3: in ye Pleura especially in that part of it w: forms ye Covering of ye Lungs. but it extends to the Mediastin: Pericardium & all ye parts of it wch extend over ye Ribs & cover the Diaphragm. the 1st of these is called a Catarrhal Peripneumony It is attended wth a Cough & Spitting I shall treat of it under the Rheumatism. the 2nd

& 3d: are always complicated as far as we can judge from Dissections. Physicians have imagined they could distinguish them. the Dolor Gravitatis indicates the 2nd especially when attended wth: a full soft pulse. the 3d species may be called Pleuro-peripneumony. Can an Inflamn: of ye pleura wch: covers the Ribs be distinguish'd from the Membrane wch: covers ye Lungs? - all the Symptoms of Pleurisy often appear & yet no Appearance of an Inflamn: of ye Pleura wch: covers the Ribs. But I believe the pleura alone may be affected. Mr: Eller

of Berlin denies this, & says we never find the Peritoneum inflamd or affected in Inflammn. of the Bowels. . Why then sh? the Pleura wch. covers the Ribs wch. is so analagous to the Peritoneum be subject to Inflammation? But this proves too much, for the Pleura is more liable to variation from Inspiration - external Violence &c than ye Peritoneum. - When that part of ye Pleura is inflamd wch. forms ye Pericardium we know it by extreme pain & palpitation of the Heart & Syncope. we also know when ye part of it wch. covers the Diaphragm

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is inflamed. wt are ye Diagnostic marks of this? - for my part I never saw the Delirium or Risus sardonicus Dr Boerhaave talks so much off. nor do even Dissections show these symptoms to belong to it.

Cardiitis

- I never saw this Disease, & believe it seldom or never happens. Dr Senac has described it you may consult him upon it. all I aim at you see in these Lectures is to deliver something new of my own. it wd employ a 12 Month to give full Historicke of every Disease.. —

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No time can be limited for the Resolution of this Disease. it will depend upon the Nature of the Effusions of wch we spoke before.

Bleeding often cures this Disease wout any Discharge from the Lungs. but few of them ever cease except wth some Discharge from the Lungs of some kind. It is ye natural & often the necessary Crisis of the Disease. Bleeding (Unless it is carried to very great Excess) does not suppress the Expectoration, but on the contrary rather promotes it.

What is ye Matter expectorated?

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there is an Excretion of mucous matter from the Lungs wch resembles Pus. this we prove from Catarrhs: but even Pus may be discharged likewise. the Ordinary Halitus may be so increased as to be converted into Pus. but why are not ye Effusions wch end in Suppurations poured out into ye cellular Texture likewise? this is a difficult Question, it cannot be resolved till we are more fully acquainted wth the Structure of the Lungs.

In Confirmation of its being Pus discharged in Peripneum: De Haen has given us several Dissections in wch

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He found no Appearance of Ulcers altho the Patient had spit up Pus for many months. I dont suppose wth Dr Haen that this Pus was found out from ye Arteries but was formed from Malitus effused in an unusual Quantity.

Besides the 4 Ordin:^y Terminations of Peripneumony of Resolution — Suppuration — Gangrene & Schirrus there is a 5th viz: an Effusion of red Globules into the cellular Texture of the Lungs. When this is ye Case ye Circulation of ye Blood is Obstructed

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& immediately suffocation is brot on.
- This Termination is very frequent
& has been mistook for Gangrene.
Morgani has many Dissections
that tend to confirm this.

The Pleura & Membrane lining
the Lungs are often inflamed & yet the
Respiration continues very free. from this
we may infer that in Cases of very
difficult Respiration we may always
pronounce an Effusion to be present
especially if they are attended th w: and b:
the pain. It is from the Respiration
only I form my Opinion of ye Danger

(a) an Italian Author

of my Patient. Pain & hard Pulse are no signs of Danger. the difficulty of Breathing is ye only symptom w: Ch: alarms us in Peripneumonies as it always denotes Effusions to have taken place.

But there is a 6th Termination of Peripneum: taken notice off by Boerhaave (a). It is known by a hard Pulse - pain in the side insomuch yt the Patient cant lie on it - constant Fever encreased by Eating ~~It~~ He calls it a Paraplenritis. It differs from the Phthisis in having a hard ~~but~~ Pulse - in having no Sputum - little Cough

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of in the patient; not being able to lie upon ye pained side. the Reverse is ye Case in the Phthisis.
He attributes these Symptoms to a Schirrus wch remains in ye Pleura.

To these I shall add a 7th Termination viz: the Hydrops Pectoris. we always find a Serous Fluid poured out into ye Cavity of the Thorax in Patients who die of Peripneumon. especially if profuse Bleeding has been used in the Beginning.

Cure.

This is well understood. Blood: Att^d is generally used wth Advantage. but it is often superseded by Blistering.

Dr. Eller of Berlin

Is Purging useful in Peripneumon:
ia? Sydenham condemns it Absolutely.
- but a late writer tells us he has used
it w: great Advantage. this he hath
arises from his great Antipathy to
Bleeding after the 3: or 4: Day. I
have had too little Experience of this
Remedy to recommend it to you.
- I think it w: relax the
pulmon: Vessels, & thus prove Servicea:
Ubaly: it was to do great a Degree as
to Suppress the Expectoration.
Are Emetics useful? The French
recommend them, but I never saw

them and the w: advantage.

Pectorals act only as Diluents. they are never given in sufficient Quantities to inviscate Acrid Mucus.

The Acrid pectorals such as Hyosc hemoniac &c encrease the inflam.y Diathesis & do Mischief.

Squills are much used as pecto: rals, but may they not operate as Emetics only? I think they do.

Oils do no service in the small Quantities they are given. & few

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Patients can bear them in a greater.

are Opiates useful in ye Peripneu-
-mony? in the Beginning of
it they are ~~not~~ hurtful. the brin:
-na Physicians tell us they give them
however very early in this Disease.
— the Cough aggravates the inflam:
-ma: Affection, Opiates by checking
this ~~cough~~ may ~~do it~~ give considerable
Relief. —

The Intestines are in some cases subject to Erisipelas from acrid matters applied to them, but we know of no Symptoms that distin:-guish it from the Phlegmon, nor if we did, w.d it lead to any new meth of cure.

Inflamm. of these Viscera are easily known by the acute pain. but they may & do happen without any pain or Fever preceding. Dissections sufficiently indicate this. such In:-flam. are distinguish.d by these two

marks. 1st by happening in Inter-
mitt.g Fevers w.th are tending towards
Continual Ones, or in all Marshy
Fevers. See Dr. Lind & Dr Cleghorn in
Confirmation of this. 2nd by y.e small-
ness, weakness & Irregularity of the
Pulse, joined w.th a painful Tension all
over y.e Abdomen, & a peculiar Cast
of the Countenance w.ch I can't describe
- It is an Expression of Anxiety atten-
ded w.th Staring Eyes. & bluid Lips. The Tension
of the Abdomen depends upon a tonic
Contraction of the Abdominal Mus-
cles. It extends too to y.e Peritoneum

membranes show their Pains only in their blind Extremities as in y: Rheumatism. the Navel is often the seat of pain in ye Enteritis which proves that the Peritoneum is often affected with this Tension as well as the Muscles. from this you see the great use of topical Bleeding Blistering & Fomentations applied to the external Region of ye Belly. — Authors have spoke much of the Symptoms of Inflam^n in ye Spleen Pancreas &c. but I know of no Symptoms which characterise them, & shall therefore hop them over. —

Dr. Boerhaave Treatise on this Disease abounds in Absurdities. - He supposes Inflamn. may be seated in the vena Porta or ye Hepatic artery. but Anatomists find no Marks of Sensibility or Irritability in the vena Porta. Inflamn. Affections must be confined to ye Hepatic artery. great Congestions happen every day in the Vena Porta & yet nothing like Inflamn. ensues. these Congestions may undergo a purulent Fermentn. & by Irritating the Membranes of ye Liver bring on

Inflammn. in it. Tubercles in the Lungs depend upon the same cause.

Inflammation is generally seated on the Gibbous or convex part of the Liver under the Ribs insomuch that it is hard to distinguish it from the Pleurasy. What are the diagnostic marks? The Only One to be relied on is the Decubitus. The patient can lie upon the affected side only, whereas in the Pleurasy he can lie on the Opposite side Only. —

Under this I include all Affections of the Joints. I shall divide it into two principal Species. Rheumatism and Podagra. I have delivered the General Theory of the first under the Head of Inflammation. the Whole System is always more or less affected in the Rheumatism. the pain is wandering & seldom remains long in one place. on w: does this depend? - when a Diathesis Phlogistica affecting the whole System w: is the principal Disease. upon this Occ: general Bleeding may be very useful - I formerly recommended topical Bleeding

only, but I have since altered my Opinion & Practise. topical Bleeding may palliate Symptoms & alleviate ye pain, but general Bleeding is necessary for a radical Cure in Order entirely to take off the phlogistic Diathesis.

— the Advantages of topical Bleeding are not so great as we might suppose. it at best gives a tedious Cure. General Bleeding hastens the Cure. It should always be proportioned to the Degree of Inflammat. Diathesis present in the System.

Is Sweating useful in ye Rheumatism? the late Dr Clark recommended it very highly. It is liable to all the

Objections we formerly took notice of, except that it can not encrease internal Determination as in those Cases where Viscera are inflamed. if Sweating aggravated the Symptoms Dr Clark always intermitted it a while & repeated Bleeding. - at any rate It should not be attempted till After Blood-Letting has been used, nor should any Sudorifics but the most gentle kind be given. Wine - Heat &c should be strictly avoided. I am acquainted w: a Physician who follows this Practise w: the most desirable Success - It should be carried on by Dover's

Powder. the Ipecacuana is $\frac{e}{y}$ chief Medicine that Operates here. perhaps the Opium may contribute to relax the extreme Pulse. I believe then upon the whole sweating may be used to advantage after Bleeding has been premised, especially if we find no ill Consequences of it after giving it 12 hours. It Shd. always be continued for 24 or 48 hours if we would wish to procure any Benefit from it.

In Nosology this Disease must be united with the Arthritis.

Hitherto we have had but little prospect in establishing a Theory or a regular Practice in this Disease. I never knew any two Physicians who agreed in their Opinions of it. I hope I shall be able to give you some thing new upon it.

For a History of the Disease see Dr. Sydenham. I shall only distinguish it from the Rheumatism by the following Marks.

1: By the time of Life it affects. Young

(a) This is rather an early period. few are subject to it till 40. if it comes on before or at 35 it generally shortens Life.

People are seldom affected wth ye Gout. it seizes few people till the Age of 35. (a) wch Dr Cheyne properly marks out as ye meridian of Life. the Rheumatism happens between ye Ages of 15 and 35 generally.

2nd by their Causes. the Rheumatism seldom appears without an evident Cause particularly Cold. the Gout is ushered in by Causes wch have no Relation to Cold.

3rd by the Symptoms preceding the Attack of the Disease. the Rheumatism is only preceded by the ordinary Symptoms of a Fever. the Gout is preceded for ye most

past 4th w: some Disease in the stomach.

4th By the seat of the pain. the Gout 9 times out of 10 affects the Foot especially the great Toe. rarely it attacks the Fingers. the Rheumatism seldom reaches beyond the Ankles, or wrists.

5th By the Fixedness of the pain. 2d y. Gout remains for several Days in one spot. the Rheumatism changes its seat often & affects more places 2d y one at One.

6th: ~~By~~ the Gout is distinguished from 2d y Rheumatism by being followed with

a Disorder of the Stomach & Head after the Violence of the pain ceases.

- This is very rare in Rheumatism altho' I have seen it twice or twice but when it produced very violent symptoms & often in such cases proves mortal.

- These Marks when strictly attended to will always furnish a Distinction between the Gout & Rheumatism.

Proximate Cause.

This has been attributed to a morbific Matter in the Constitution.

- There is no Opinion more universal in Physic than this. I have opposed this

notion & have been looked upon as a paradoxical blunt Fellow for it. - Reject the Existence of Morbific Matter 1st because it is entirely hypothetical & we have no proof of it. the Matter found in ye Joints is the Effect not ye Cause of ye Disease. - the Hypothesis first took its Rise from the Universality of Lumbrics in our late Systems of Physic. formerly all pain was attributed to this Source, but our late Improvements in ye Knowledge of the Nervous System has shown us ye Absurdity of this Doctrine.

(a) The hem: Disease we grant is hereditary. but then this breaks out at once, & dont continue inactive in ye Constitution 'till beyond the Age of 35.

2d: Physicians disagree About ye Nature of this Morbific Matter. Journ. Med. Mon: tion 40 different ~~Op~~ Opinions About the Quality of this Matter.

We cannot infer the Existence of Morbific Matter from ye Disease being Hereditary. This depends upon certain Conformation of System, as we see in the Epilepsy & Phthisis. (a)

Contagion has been adduced in Favour of Morbific Matter, but there are no proofs of the Gout's being contagious. Vanswieten Stories upon this Subject are ridiculous

as we often see it brot on in a few minutes after drinking a glass of wine. the wine here cannot not generate a mor lifie matter in this short interval of time.

in the highest Degree & prove nothing.
we every day see thousand Examples
of Persons exposed to it & yet do
not receive it. I conclude then y
the Disease is not contagious. &
therefore cant depend on Morbid matter.
3.rd The Phanomena of y.e Disease
are by no means reconcileable
w.th the Notions of Morbific Matter
- how often do Passions of y.e Mind -
& hard study induce it suddenly! Surely
Morbific Matter w.d act more uniform-
-ly- Besides we see it suddenly remo-
-ved from one part of y.e Body to y.e Other

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by a Fright or any Other Emotion of the ~~Body~~ Mind Could Morbific matter be moved in these Cases from One Part to Another.

- I One knew the Oil of Camphor when applied to ye Ankle remove it immediately to the Opposite Ankle, & when applied to ye Ankle it had moved to, by the Application of ye same Oil removed to ye Knee, surely no Morbific matter could be translated or secreted thus suddenly. be Often dec it drove from ye Stomach by Stimuli - Now how can these act? they have no power of destroying Morbid

matter. Is it not reasonable to suppose that they produce their effects by obviating the atonia of ye stomach on w^ch: the Gout depends.

In a word all the Theories that have hitherto been proposed, abound wth such palpable absurdities that I think there can be no occasion to refute them.

In supposing a morbid matter present we must call in certain motions in the System to acc^t for ye symptoms of the Gout. the Theory I am about to offer will tend still further to shew

the Absurdity of Morbific Matter

I shall deliver my Opinion upon this subject in two or three Propositions.

1 The Gout is a Disease of the whole System, or a Disease that employs the more general powers of ye system or a Disease depending upon a certain Condition Constitution & Conformation of the Body but more especially of ye moving powers. This is proved 1st from its affecting peculiar Temperaments only, such as ye male Sex. Women & Eunuchs are rarely affected w:th it. Castration produces

the female Constitution. all men are not subject to the Gout. large robust men are chiefly disposed to it, especially if they are plethoric & disposed to Obesity. lean people wth a smooth shining skin are seldom subject to it. a Roughness & Coarseness of ye^e skin are generally connected wth ye^e Gout. wise men likewise are more sub. to it to Fools. but this Observation is not so universal as to be a Mark of Genius. 2^ly It attacks at a peculiar time of Life. the solids are perpetually changing in every different period

of Life. this is one ligament in favr. of its depending upon a peculiar formation of the System.

2nd Prop: the Gout is chiefly a Disease of the nervous System. all Diseases affect the nervous System more or less. but ye Gout affects the nervous System more purely & produces its Effects secondarily upon ye vascular System. this makes it a doubtful Matter Whether this Disease should belong to ye Pyrexia or neuroses. Van Helmont was ye first who pointed out its being a nervous affection. Boerhaave

is obliged to adopt ye same Opinion.
- But I think it is proved beyond a doubt to be seated in ye nervous System from ye facts we have mentioned of ye Causes & Cure of ye Gout being so much influenced by the ye Passions of ye mind, 2: from its removing nervous Disorders such as Epilepsy Vertigo &c 3: from its being so much connected wth the Stomach. 4: from its being so suddenly translated from One part of ye Body to ye Other. these motions are too sudden to be carried on any where else but

in the Nervous System. the strongest argument we have adduced is from its Connection w: the Stomach. you all know y Stomach is provided w: a vast number of Nerves & endowed w: various Sensibility & w: gives it a very great Connection w: the Sensorium, & this gives it a very great Connection w: every part of the Nervous System especially w: y Skin. It indeed w: the Extremities of all the Vessels in every part of the body particularly the Uterus. all Hamorrhagic Congestions are greatly connected

1a. The Stomach may wth propriety be called ye Index of the whole System in all Diseases, more especially in the Gout.

w: the stomach. I told you some instances a few days ago of a remarkable connection between the stomach & the Eyes. But the stomach & lower Extremities are most wonderfully connected w: each other. Van Helmont tells us y: he once dislocated his ankle when he was very hungry w: immediately took away his Appetite but upon reducing his ankle his Appetite was restored. (a)

Such is y Constitution of our System you see y: Motions in one part produce Motions in another, in such a

manner as to increase the Impetus of ye Blood in ye Muscular Fibres to such a Degree as to bring on ~~the~~ Inflammation. W^h are ye Motions w^h produce the Gout? we know too little of ye Nervous System to explain this Question fully. I shall attempt it however & begin by Observing 1st that there is a Sensorium or Centre in w^h is lodged an Energy or Power w^h exerts itself to ye Extremities of the Nervous System. this Energy depends upon Impressions made on ye Extremities & a propension in them

+

(a) or acord.g to their Relation to y.e Furorium. —

the Impressions made on ye Extremities produce different Effects on ye Sensorium according to a Difference of Conformation in these Extremities.(a) not only Motions, but a Want of usual Motion will produce a Variety in ye Sension or Motion of ye System. this is illustrated by Syncope. the Action of ye Heart depends on ye Energy of ye Sensorium & ye Energy of ye Sensorium upon the Reflux of Blood from ye Heart into ye Brain. in this Case there is a Reaction in the Sensorium w^ch: Lets ye Heart in Motion Again, & this too in Conse-

1st In all Cases of Atonia the fundi-
ments in order to remove it.

quence of ye Heart's Motion having ceased.
: the same takes place in a wanting
Tension in the Extremities. the
Sensorium reacts to excite them.
Let us now apply this to ye Theory
of the Gout. ——

I suppose the Energy of ye Sensorium
is not extended to ye Extremities of
ye Vessels in ye great toe. hence an
Atonia & Spasmodic Affection will take
place there. (a) The Sensorium reacts in
such a Degree as to bring on the
Inflamm: Diathesis in the part. the
Gout then you see is a topical Fever.

Do ye Phanomena of the Gout agree w: this Hypothesis? Yes. 1st I conclude an Atonia takes place in ye Feet fm an unusual Dryness & stoppage of ye Excretion of ye Feet - by a Coldness weakness of the parts - by Cramps & Subsultus of the whole Limb. all this I think tends to prove a Constriction in ye vessels affected. 2nd: we conclude an Atonia to be present from ye Energy of ye Sensorium being diminished w: we know always favours the Formation of Phaem. this is proved from its

attacking old people - or people who have been using to hard labour - Intemperance and study venery - and all other Causes wch tend to weaken the Excitement of the Sensorium. Other Symptoms of Debility appear in ye whole system such as Costiveness Acidity in ye Stomach &c. It is of no Importance here to explain in what manner the Reaction of ye Sensorium is produced. - But we said the Gout affected the robust full strong people who live high, hence it prevails more

in England than in any other country in Europe: now all these circumstances point out a constitution wch is subject to Inflammy: Diseases. the Gout attacks likewise at ye season of Inflammy: Diseases & is seated too in ye ordinary seats of Inflammn: viz: ye membran: part of the Muscles, or joints. in a word it follow ye ordinary course of Inflamy: Disorders. there is therefore a foundation for ye Gout in the Inflamy: Constitution something distinct from wch: we called the

(a) It differs from ye Rheumatism chiefly in not being induced by Cold, but by Causes which take off ye Energy of the Fascicum.

Inflamm.y Diathesis. The Atonia then produces such a Reaction in ye Sensorium as takes place in Cases of Inflammation. But if the System is so weakened that the Inflamy. Reaction cannot follow, other Symptoms occur of wch we must now speak. all ye Causes of ye Gout act directly by diminishing ye Energy of ye Sensorium or indirectly on the extreme parts. ye Palsy following ye Gout is a proof of this. — how ye Gout may be so gentle as not to produce a Palsy, but it may produce an Atonia of ye Stomach & hence all

(a) we know y: y Reaction is strong in's by the Paroxysm being violent & occurring not very soon after. But these violent Excite-ments of y Sensorium tends to destroy the Tone of the Fluids, & thus contribute towards the Repetition of Paroxysms tho' perhaps less violent.

the Symptoms we see occur when this Organ is Affected. This explains the Reason why Stimuli remove this Atonia & thus cure the Gout.

- This is the first Case of Anomalous Gout or a Case in which the Sensorium does not react so as to produce the Inflammatory Impetus (a). The same way of Reasoning will explain to us the Cause why the Lungs & other Organs are so often affected with Spasm. Effusions & Dropsies.

- These Effusions when they happen in the Brain (from a very weakened Energy of it) induce Apoplexy Palsy &c.

the Peripneumonia Nothritica of Sydenham is an Inflam.y Disease & should be treated as such. but in Cases of retroceding Gout no Organs are so much affected as y.e Kidneys from their Extreme Connection w.th y.e Stomach & lower Extremities. in Cases therefore of y.e Brain's Reaction Serous Effusions will be very apt to happen in the Kidneys & hence y.e Reason why Gouty people are so subject to Dropsy Conections. the Gouty Inflam.n is disposed to effuse an Effusion sui generis w.ch is disposed to harden into a Chalky

Earth in the Joints. these Concretions are likewise common in all the Viscera but especially the Kidneys. do Nephritic Affections occur before a calcarious Matter is formed? ~~yet they are~~ no - it may lie dormant there for some time till a new Fit of the Gout or some other Cause induces an Inflammation in them.

Doctrine

all this General tends to lead us to the Cure, or Methodus Medendi.

Is there a Radical Cure for the Gout? - It is a constitutional congenial and often a hereditary Disease, which gives us Reason to think it can not be perfectly

Ath. 1265 last Edition of his book

and. See Boerhaave[a] upon this subject. But it cannot renew a Man's Constitution. Medicine is only partial & Often partial in its Operation. it makes but few immediate Changes upon the System. Our chief Dependance in changing the Constitution must be taken from Regimen. Bodily Labour under this Head may be considered as a radical Cure. We never See Labouring Men subject to it, even those who are descended from Affluent families are never seized if they are so reduced by Misfortunes as to be obliged to work for their Support.

How does Labour Operate? no
Mode of Gestation except bodily Exer-
cise will answer our Intention in
this Disease. Sailing does not prevent
it. Sea-Officers Commanders are as
subject to it as Other people. bodily
Labour then appears to act by preserv:
the Tone of the Muscles ch w: we know
are covered th w: the Membranes ch are w: in the
feats of the Gout. wounds - Fortures
& violent strains have produced radical
cures for the Gout. I formerly thot
Exercise acted only by promoting the
Perspiration. Dr Boerhaave seems to be

of this Opinion, & infer it from same Facts, but I rather believe this is an accidental Circumstance & depends upon an increased tone of the Bowels. But still I grant the Gout is connected considerably wth Perspiration hence the Reason why Country people are seldom troubled w: the Gout in ye Summer.

Should bodily Labour be continued constantly even in advanced Life? No. we have Instances of Persons who have laid it aside, wth out being seized Again wth ye Gout.

I think it Sh^d be continued till the Inflam^y Diathesis of ye System is entirely

removed wch is at a Medium about ye 50th Year of Life. —

But there is Another Remedy for the Gout. viz: a Low Diet. it acts by taking off the Inflamy Constitution wch is ye Foundation of ye Gout. — But some tell us a Milk Diet has brot on the Anomal: Gout we were speaking of. we must to Obviate this Observe that there are two Species of Gout viz the Inflamy & Atonic. the 1st is seldom dangerous, altho' attended with great pain wch weakens the Nerves & thus induces the Atonic State. the 2nd arises

(a) It Ought always be joined with some Degree of Labour! —

from Debility. the Reaction here is generally very weak, hence no Inflammations appear in the Extremities but a variety of Diseases in ye whole System. - the 1st: attacks younger people the 2nd: older people. the 1st: occurs in ye first stage of the Gout, the 2nd: in the last. an Attention to these Circumstances ought regulate our Remedies in treating the Gout. the Milk-Diet should be used in the Inflamm^y: (a) only, - in the Decline of Life when the System labours under an Atonia this Remedy will prove hurtful. Milk in particular

as well as all Accurate Diet tends to induce a Debility of the Stomach. No Habits shd be checked suddenly. a Person shd never enter upon such a Diet suddenly from a very full One. Meat shd gradually be laid aside, nor shd the Vegetable Diet be too sud. denly resumed, or a very dangerous & irregular Gout (from ye Atonia of ye Lyp tem) will be induced.

How long should this Diet be continued? Celsus & Dolens say One Year. But Experience has taught me ye: It should be continued for several Years, or till

(a) viz: a Man from taking too great a Quantity of Spr of Nitrol was seized w: the Gout w: was cured by a few Doses of an Alkaline Salt.

the System begins to decline wh: as we said before was about ye 50th year.

The next Remedies are Alkalies & Laxatives. they have been used in Rheumatic Complaints wh: Advantage wh: has led the way to their being used in ye Gout from a Notion of its depending upon Acidity in the Constitution. Dr Boer has been inclined to this Opinion. But he found it an One Last Only. Winds are perhaps prejudicial in ye Gout, but do not furnish ye Matter of it, for we find they encrease it ye Moment they are taken. Claret in particular has these Effects. all Wines

are hurtful in proportion to their Acescency. But ye mild Spirituous Wines wch abound wth Brandy such as Port & Madeira are found very useful in the Gout. Whatever then Alleviates the Acescency of ye Stomach will likewise strengthen it, and thus remove the Atonia which is ye Cause of the Gout. Lime-water - Magnesia Alba, & the many medicinal waters wch contain Calcarious Matters in them are only efficacious in this way.

Bitters have been much commended in the Gout. they brace up ye Stomach

& wt the whole System. this is proved from their curing Intermitting Fevers. they are hurtful in ye Inflam: Gout, but do great service in the Atonic Gout. they have longhen used in this Disease. if continued too long they bring on Atonia in some parts of the Body wch lays ye Foundation for many Chronic Diseases. they act by Excess of Excitement wch we know in time destroys the tone of the Vessels. they must therefore be used very cautiously, & only in Cases of great Atonia. if continued too long they will encrease the tone of ye Vessels

too much, & thus destroy them.

Chalybeates have been found very useful as tonics. the Tunbridge & Bath waters are impregnated w:th ferr:al, & do great service in Cases of Atonic Gout. in ye Inflammat:y Gout they do Harm. the Bath waters are supposed to be best as from their warmth they determine more to the skin.

Bleeding.

Much dispute has been entertained about this Remedy. we can now see ye Reason of it. Lister & the late

Dr. Thompson recommend it highly, but Dr. Sydenham strictly forbid it. in ye Inflamm.y Gout it is useful but in ye atonic, which is less acute & comes on in ye Decline of Life or in weak Habits it is hurtful.

These two states of ye Gout are often ambiguous. in these Cases topical bleeding is to be preferred. Stahl & Hoffman abound w. Facts in Confirmation of the Usefulness of topical bleeding. It does not prevent ye Reaction of ye Sensorium as we might be induced to suppose.

Vomiting.

Dr. Sydenham did not use it. Dr. Lister recommends it. I have often seen it useful. It acts by removing humidity in w: we said favoured ye formation of the Gout, & by promoting its Excretions. But it acts by supporting ye Tone of ye Stomach as well as by cleansing it. ~~thing~~ it determines likewise powerfully to ye Extremities. but Vomiting shd not be used too frequently or we shall destroy the Tone of the Stomach, & thus induce worse Complaints than we aim to relieve. –

How far is Purging useful? all Gouty Patients are subject to Costiveness wch wd always be removed. but the frequent use of Purgatives weakens the Tone of ye Alimentary Canal & of ye whole System, & thus do very great Mischief. Dr. Sydenham condemns them justly. Dr. Lister used them frequently especially after the Gout had gone off, but in these Cases I have seen it bring back a Fitt of the Gout. a late Writer has recommended the purging Mineral Waters, but never gave them till after ye 50th Year of Life. You will easily

understand the propriety of this practice from w^h: we said before. before that period of Life all purging Medicines must prove hurtful.

Sweating

Dr: Sydenham speaks more favourably of Sweating than of the other Remedies we have spoke off. but he found it dangerous in the time of a Paroxysm. Yet th^o: never he urged by Heat or heating Medicines, nor carried to too great an Excess. as it diminishes Perspiration according to Sanctorius' Observation.

– Most of our Empirical Medicines are of ye Sweating kind. & most of them

(a) Ash: 1276

do Mischief. Dr. Boerhaave gave them very freely. you may see ye Medicines he used in his Treatise upon this Disease. as I have seen a gentle Ma: dor upon the pain continued for some time, do considerable Service. but the Relief Obtained in this Manner is not very durable.

Topical Applications.

These are of doubtful Use. many of them have been proposed. the chief of them are certain Antispasmodics particularly Opiates & Camphor. I too soon before the Consequence of using the

Oil of Camphor. they are only pal-
liative Remedies & often drive ye Gout
from one part to another. Warm
Bathing has been much used. by
its Heat it produces a powerful
Reaction but by relaxing ye high-
bowing Vessels it induces a more gene-
ral Atonia, & thus often throws the
Gout upon some of ye Viscera. I have
seen it once bring on the Hypocon-
driasis wch ended in a Mania wch has
continued upon ye unhappy Patient
for these 20 Years. he has sometimes
been relieved by Blistering. —

Emollient Poultices of all kinds may have the same Effects. Flannel is the only safe Application I know. - perhaps Blisters may prove useful? the Moxa of ye East Indies seems to operate in this way. I have seen Blisters give Relief, but I have likewise seen it attended wth bad Consequences. I once applied one to ye Hip of a Gentleman who labouredunder ye Gout, but it drove it immediately to his stomach where it brot on a violent Vomiting wch did not cease till ye Gout was brot back again to his Hip.

upon ye whole I think Blisters are as hurtful as the warm Bathing.

To conclude I sum up all I have said in saying that Labour & low Diet under ye Restrictions we mentioned are ye only radical Cures we know. - the Disease may be rendered less violent by gentle Vomits & Laxatives by Alkalies & Absorbents by gentle Exercise - & by Avoiding Intemperance of all kinds - Luxury & the like.

~~Treatment of Gout in the Fit~~

When the Gout comes on or during a Fitt of it we must use a moderate

tho' not a low Diet. a small Quan-
tity of Anim.l Food must be indulged
but Spirit.s Liquor should be avoided.
we must endeavour to obviate the Return
of Atonia by moderate Exercise - fre-
quent vomiting (One a Month & not more)
by removing the Effects of Indigestion
by Opening the Bowels, & by giving Lime
water or Soap. Leas. But this should be
confined to the Spring & Fall chiefly.
by avoiding the evident Causes of Atonia
such as s.v. venery. I dont think too
early a use of venery brings on y.e Gout.
for y.e same Cause w.h dispones to the
Gout also dispones to venery. but Excep

of Luxury at all times enervates the System I should therefore be used wth great moderation by Men in the Decline of Life.

2nd Hard Study. this is not confined to Abstruse speculations. Men of Trade are guilty of Excess in it. Gamesters more especially are disposed to it. I have known a Man who was always seized wth a Fitt of Gout when he lost any thing considerable, but never was troubled wth it while he was successful in his Games.

3rd Cold - this should be strictly avoided

& strongly guarded against. a De:
termina: should be kept up towards the
Gout by new & clean stockings every
day. for old or long worn stockings
become saturated w: perspirable Mat:
ter.

But how is the Atonic or Retro:
ceding Gout to be treated? there are
two Cases of it both founded on Ato:
nia of the Joints. 1: where it is thrown
inwards & is of the Inflam: kind & 2:
where it is purely Atonic the 1st:
dom occurs. when it does it must be
treated w: the Antiphlogistic Regimen.

the 2d: is more common & much more difficult of cure. the Indication here is to restore the tone of ye Extremities. But we are provided w:th no Remedies for this purpose. the Rubefacients are generally used, but w:th very little success. Frequent Bathing has proved useful in those Cases. the Bath Waters operate in this way by their warm & tonic powers. When ye Gout is seated in ye Stomach Stimulants & Opium are indicated such as Spirits in considerable Quantities, provided no Inflam:y Diathesis attends, & Nothing but

a simple Atonia. they shd be proportioned to the Constitution of ye Patient & the nature of the Disease. if they do not intoxicate they may be given to ye Quantity of a Quart. we always know when enough is taken from ye beginning Intoxication. they act as Narcotics.

Opiates are found useful in this Case of Gout. how do they operate? by removing the Spasm induced by ye Atonia.

Volatile Alkalies have likewise been used wth success. but they should be given in large Doses. I have given ℥i of them at a time wth great advantage.

they are stim.: & sedative virtues.

Camphor is often given w.th advantage while the Gout is seated in y.e stomach. - I am at a loss to tell how it acts. - I have often ordered it w.th snuffs joined w.th volatile Alkali. It ought be given in larger Doses y.n ordinary.

What must we do when y.e Gout is fixed in y.e Head, Lungs or Bowels? all the Remedies we have spoke of in y.e Gout of the stomach are not proper here. Opium is the chief Remedy to be depended on. But I don't know to w.t Dose. nor have I used it much in these Cases.

Blisters have been applied near ye: place where the Gout is seated but I can't say we: any great Advantage upon ye whole I know of no regular practise established in these Cases.

But there is a Another species of Gout hard to be distinguish'd depending upon an Atonia of ye System. it is known by a Melancholly & lyeth affecting Persons subject to Gouty Complaints. in this Case we must have Recourse to Chalybeates Corroborants Mineral Water, & all such Medicines as act on ye Stomach. This finishes

all I had to say upon the Gout. - I have one more Fact however to lay before you w^ch: I heard last night from Sir John Pringle. the great Dr. Harvey had no sooner published his Acc^t: of the Circulation of the Blood than an general Outcry was raised against him, & he lost all his Business. Such is the Fate of Many who Labour for the ~~Publ~~ public Good! - I hope however this will not be my Case. I rely upon my Pupils to support my Reputation in the Doctrines I have been advancing, & trust you will not find my^s: entirely destitute of Foundation.

I have given you the Character of this Order in my Syllabus. I call it Phlegmasiæ distinguish it from ye various Efflorescences of ye Skin wch are not of the Inflamm: kind such as the Purpura & Petechiæ of Lauvauge wch are simple Effusions. I call them "Post Febrem" to distinguish them from ye simple Phlegmasia inasmuch as they are ye Consequence of Fever only. – they are further distinguished by depending on contagious Matter introduced into the Body wch by uniting the wch ye perspirable Matter is determined towards ye Skin where

it is deposited so as to excite topical Inflammation. they sometimes produce Pustules wch are disposed to ye pustulo-ry suppuration. At other times they terminate in white pellucid pustules & 3rd in red spots wch end in Desquamation such as ye Measles & Scarlatina. they have all this in common yt is ye Eruption is spread all over ye Body. but there is a 4th kind wch is confined to particular parts of the Body such as ye Erisipelas & Anthrax. these are ye principal Genera of Exanthemata. there may be others.

Each of these we have spoken of have diffinct Causes wch: you may read in practical writers. I shall only observe that they are much connected wth the Mucous Glands of ye Throat, wch characterise them above all things. - they are further distinguished by the Fever attending the Eruption only or continuing afterwards. the Fever likewise is diffinct being either Inflamy: Nervous or Putrid.

There are Eruptions in Fevers wch dont depend on Contagion but depend on ye particular stage of Fevers & may arise in

any Persons certain Circumstances being given. many Persons are subject to them in ye time of sweating or from sweating too long. or they may happen from Contagion in ye: the sweating Regimen or a particular structure of the skin may bring on. the Females are more subject to Miliary Eruptions than Males & young Persons more than Old. Even those Cases therefore where Contagion is introduced their being exanthematous may depend upon the nature of ye skin or Other Circumstances.

They are distinguished from those Exan=

: themata wch: depend upon Specific Contagions 1st: by those wch depending on Specific Contagions being Steady in their Effects, & in having a regular Eruption Course of Maturation & Desquamation. in the Others no such Uniformity of Eruption or Continuance is Observed. - the 1st are the only Idiopathic Exan: : themata. the 2nd are simply Febrescum Exanthematis . but the most important Distinction is taken from the 1st: Affecting Persons but Once in their Lives. the Plague may be an Exception to this when a Contagion producing it is not precisely

specific. But further the Idiopathic Exanthemata are contagious & therefore Epidemic. The Other are Sporadic such as ye Erisipelas wch is neither Epidemic nor contagious. I own this dont afford an universal Distinction. for ye Matter producing Exanthemata may be discharged by insensible Respiration. this I believe is the Case in the Plague. When ye Infection then does occur it must be considered as owing to a more powerful Ferment^n^ or more abundant Matter. Fevers depen:ding on Morbific Matter show themselves

1st by Eruptions on ye Skin
2nd by Determination to ye Mucous Glands of the Fauces or Intestines.
3rd by Depositions on ye Lymphatic Glands. the most virulent Contagions are deposited in the last. the next in Degree is determined to ye Mucous Glands especially of ye Throat. ye most mild & safe kind of Exanthemata is when the Determination is to ye Skin, provided they are of a benign nature.

I formerly excluded from ye Exanthemata Effusions without Inflammation.

Qr: shall we say of ye Purpura & Petechiæ. in the last Case there is

an Effusion of Blood. in Other Cases an Effusion of yellow Serum. I can say nothing positive upon this subject.

Wt shall we say of the Aphtha? to wt Genus do they belong? I cannot tell, but must refer you to Dr Boerhaave & Other practical writers. —

I shall not take up my time in giving you ye History of this Disease. I shall confine myself to those Observations only wch have an immediate Connection wth the Practice.

1st I know of no Disease y^t depends more evidently upon Specific Contagion than this. it is of a determined kind. It is not so liable to be controlled wth Septic or Sedative powers as ye Other Contagions we have spoke off. It is precise in its Operations. we often see it taken from ye milder pock pro-duce a virulent Septic Contagion

~~Exactly the same~~ small pox

we likewise see y most virulent Conta-
-gion produce the mildest Disease in
another Body. the Disease then de-
pends more upon the Constitution &
the Treatment of the Disease than
upon any Variety in y nature of
the Contagion, & all y Modification of
it is received in the Body of y Person
affected. I doubt much whether it is
influenced by Heat or Cold. our Bodies
are easily affected by Ferments in sum-
-mer y: winter, but y Contagion is not
exalted by it. I have seen y most
putrid small-pox produced in the

winter season.

There are two Forms of ye Small-pox
; Distinct & 2nd Confluent. the rest
are different Degrees of these two. the
1st is rarely the 2nd always dangerous.
It is attended wth very numerous Pus:
:tles. the Danger of ye Distinct
depends only upon their number.
the Distinct are known by being
circumscribed & irregular & by having
Effusions wth become purulent. y^e
Matter in ye Confluent never becomes
purulent. but always remains watery.

But there is a Degree between these two. - But further in ye confluent small pox the Fever continues. ~~to~~ While in ye distinct is gone entirely off. the Fever in ye 1st Case depends upon topical Irritation & hence is proportioned to ye number of Pustules. I chose ye word Irritation rather than Inflammation because Inflammat^n is looked upon as a good Symptom & always occurs in ye distinct Small pox. ye Irritation in ye confluent Small pox depends upon ye nature of ye Effusion wch may be more lurid & not disposed to produce

ye Inflammative Effusion. but w^h is the
Cause of this? - it may depend
upon a great Quantity of ye specific
Contagion passing off by insensible
perspiration & not stagnating und
ye Cuticle. w^h Circumstances favouring
this stagnation & influence ye formation
of more or fewer Pustules? 1st: the
Obstruction of Perspiration. Pustules
we find always abound most around
Plasters: this Inoculation proves
sufficiently. the Suttonians have con-
-trived a way of bring^g: back to any part

they please, it in any form they please by ye size of their plasters. - Children always have most pock upon ye Cheek on w^ch^: they lie most. Dr. Sydenham observed wth Truth in rejecting the warm Regimen w^ch^: tend to confirm this Observation. Dr Glass found all heating Medicines or Regimen render ye small pox confluent if given while the Fever was high. - he never gave his Sweating Medicines till y^e^ Fever began to Abate.

The confluent small pox is always proportioned to y^e^ Inflamm.^y^ Diathesis

see Also his Acc.t of y.e Diseases of
1730 " hoc tempore, adultis viribus
" gravari incipiebant Morbi Inflam-
= matorii iique qui Variolis corripi
unt in Pejus ruebant, & majorem
Morbi Severitatem quam antea
Destinebant." — p. 156
= fol. vernali

of the System. Dr. Winterringham says he always found it corresponded wth y^e Frequency & Virulence of Other Inflam. mat.^y Diseases y^t prevail at y^e time. y^e see his Acc^n of y^e Years 83. - in his Treatise upon Epidemicks. - I have Often seen the worse kind of small pox affect those who have been much exposed to Cold - Intemperance Fatigue & Venery. they allaut by increasing the Inflammat.^y State. I conclude from all this y^t the Confluent small pox depends more upon ye Constitution it affects than upon a greater Septic Quantity in ye Contagion.

But w^n shall we say to ye Face's being so much ye Seat of ye Small pox^n. no other Eruption appears there. It must be owing to a particular Condition of the Skin in ye Face. there seems to be a Determination of ye various Matter to it. we cannot say w^n: this Condition of the Skin is: nor is it of any Importance to enquire.

Method of Cure

I shall^n speak of Inoculation. I shall say nothing of ye Propriety or Usefulness of this Operation. Experience speaks sufficiently in its Favour. not above 1 out of a 1000 are lost in it.

Wh: gives Inoculation these great Advantages? - little depends upon the Choice of matter for as we before hinted. - nor do any Advantages arise from ye small Quantity of Matter introduced in Inoculation. this Experience has often taught us. still less depends upon ye nature or Age of ye Matter employed or ye manner of performing the Operation. Wh: Advantages then has Inoculation? 1st: we can chose ye Age of our Patient. full grown subjects are most liable to inflammatory Diseases. Children are less so. too

much stress has been laid upon the advantage our late Inoculators perform on all subjects indiscriminately without any Regard to Age. People about the Arms are most disposed to Inflam.: Diseases & generally have the small pox worst. I do not think Infants favourable for.: small pox upon the Acc.: of their being so subject to Fits. The Suttonians never inoculate any under 2 Years of Age. I don't find that Teething during Infancy has any Influence in making them more subject to Fits. Sucking Children are often in great Danger

from their noses being obstructed by
Pock w.h prevents their sucking entirely.
Parents shd always be apprised of this
before we inoculate their Children
2nd another Advantage is the Choice of
Season. I would advise to avoid the
cold weather, and the extreme Heat
of Summer. the Spring & Autumn are
the best Seasons for Inoculation. Sutton
indeed chooses the Summer Months. Inflam
mat.y Diseases are lss frequent in Summer
than Winter. this joined w.h his cool
Regimen may render his Practice
safe especially in Britain where our
Summers are seldom very warm.

(a) the chief Reason why the Gentoo Nation in ye East-In-dies have ye Small pox so favour-able by Inoculation is owing to their living entirely upon Vegetable Food.

3rd: Great stress has been laid upon preparing the Body. I grant that every measure that lessens the Inflammat.y Diathesis may be useful. hence the use of forbidding wine - animal food &c.(a) the free use of ye bowels in time tends likewise to diminish the Inflam.y Diathesis. 2d: Medicines are useful? a few working purges take off the Inflam.y Diathesis of ye system, but can do more y^n^ empty the bowels in respect of purifying ye Body.

Mercury has been mentioned for this purpose. It is very stimula:

& tends to increase ye Inflammy.
Diathesis when given in large quan-
tities. - I dont believe the Suttonians
use any &c in their Preparations.
they are accused of using Antimony
but it must be in too small quantities
to do any Juice. I dont think any
thing depends on Medicinal Prepara-
tions.
4th: The greatest Advantage of Inoculation
consists in avoiding Occasional
Causes such as Fatigue Cold - Intem-
perance Jealousy &c ye like. these tend
to render the Small-pox malignant,

& Persons inoculated always we know avoid them.

5.ly we can choose Persons in Health as the Subjects for Inoculation. too much has been said in Favour of this Advantage. I have seen, many People the w: Inoculations on their Skin scized w: the Small Pox & yet have had it more favourable than Others.

6.ly the Great Advantage of Inocalation as practised at present consists in the Management of it. this Ch: consists 1.st in our Patients living on a more Spare Diet than Ordinary & a Strict

(a) Antimony & Mercury may be very useful about ye time of the eruptive fever to remove ye Inflam^n Phrasen. —

Attention to ye non-naturals, especially in Drinking & in Intemperance of all kinds.

2nd by avoiding Irritation in ye primæ viæ. gentle purges & vomits shd. therefore be given occasionally. Eggs & Fruits in Vacuations are hurtful as well as in the low Diet. After the Operation is performed the same Treatment & Regimen shd. be continued &c.

3^d^. Cold Regimen shd. be used after the Operation is performed. ye Brachmins use the cold Bath. here it wd. not do. it appears to act by Obviating the Febrile Phæn.

4th. Blood-letting shd. be used during

the eruptive Fever when Circumstances require it such as full strong Pulse & other Inflam.ry Symptoms. —

5.ly Emetics are Absolutely necessary to take off the febrile Spasm. Nauseating Medicines do not answer so well as Emetics during the eruptive Fever.

6.th the use of Cold is of y.e highest Importance in the eruptive Fever & is y.e greatest Discovery of y.e present Age. It takes off the Irritation from the Heat on the Skin & thus Abrogates the Inflam.ry Diathesis w.ch we said before rendered the small pox more virulent. the amazing Success w.ch has attended the

new Mode of Inoculation depends entirely upon the free use of Cold. there are some Difficulties from Theory in Account for ye Operation of Cold in ye small pox. the Heat of the Body is in a compound Ratio of ye generat.g power in ye Body & ye Temperature of ye external Air when the ~ is increased, the Second must be diminished. Cold wegrent induces the Inflam.y Diathesis. but in a Fever it resists the Action of Cold, & dont operate as it does in Health. I have heard of few Instances of any Accidents from y^e use of this

Regimen. so far as not in y^e least to invalidate ~~it~~ its Effects.

This is the great secret of y^e Sutto==nians they likewise use Antimony & perhaps some Mercury with a great plenty of Acids. but these have little Effect in Comparison wth the cold Regimen.

Should the Pock become confluent what must be done? Dr. Sydenham used Nothing but Acids & Opium in such Cases. if we consider y^t the Fever depends so much upon Irritation we may easily conceive how useful

Opium must be. if ever it does harm it is when given in too small Quantities the Vienna Physicians have followed Dr. Sydenham's Practice & w.th great success. they gave it three times a day. Opium is safe in all Cases of Suppuration after y.e Inflam.n state is over. May not something else support the Liver besides Irritation? yes - in the confluent Small pox there is a kind of Inflam.n & an Atonia of y.e System takes place joined w.th a Septic Tendency w.ch increases this Atonia. here the Opium may act as a Stimulus & remove

the Atonia. Wine has lattely been introduced w^th: great succes in ye conflueent small pox. it operates by obviating this Atonia we spoke off.

At present we have lys occasion for Opium & generally have recourse i^n to Antimon:^l Medicines. the use of these is very ancient in ye small pox. a Physician at Berlin introduced the ☿ Emetic w^th: great succes about 50 years ago, but it was soon droppt again. It may be employed at all seasons of ye small pox w^th: advantage. I consider it as ye most

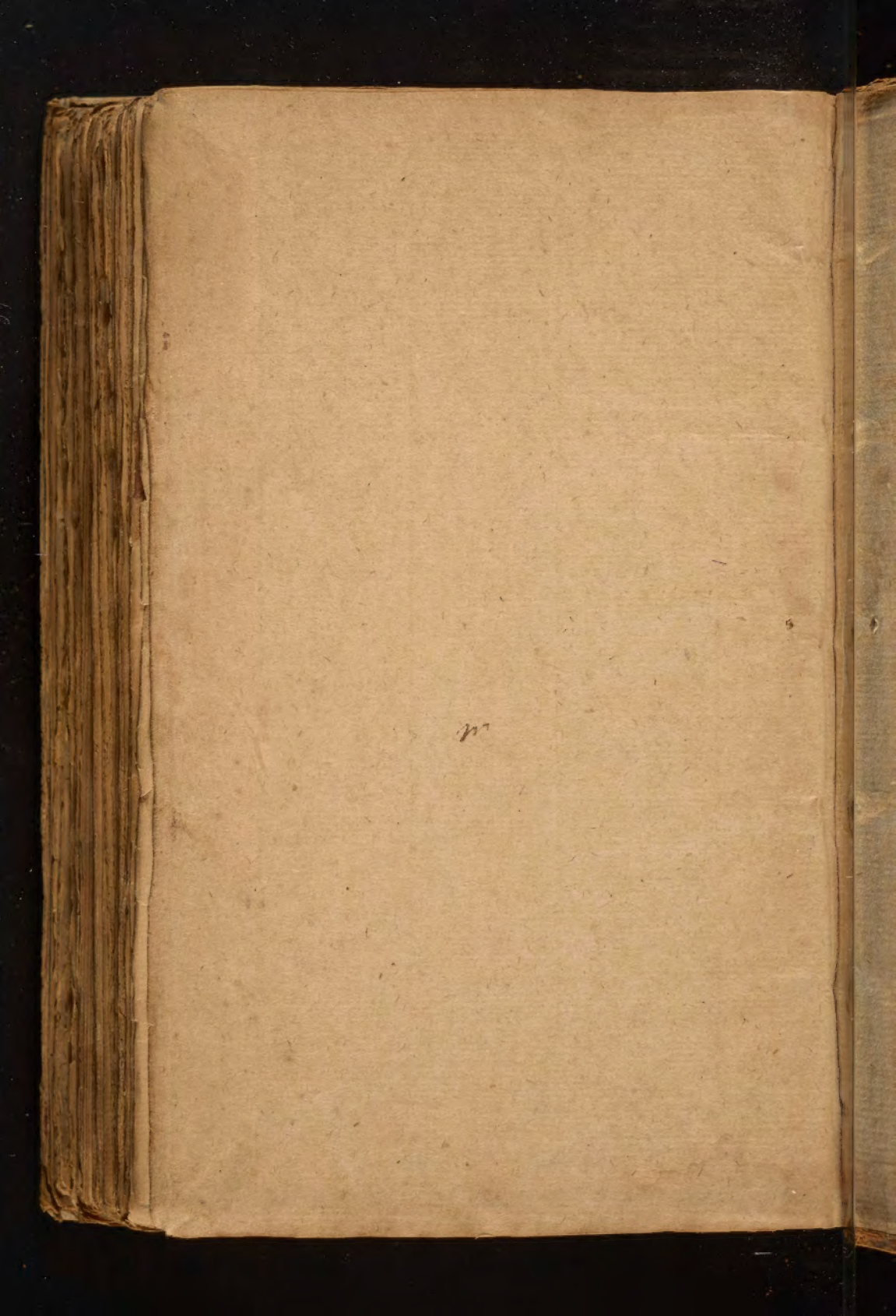
important Remedy ever introduced in the Cure of ye small pox.
2. Peruvian Bark. is another noble Medicine to promote Suppuration & to Alviate Putrefaction. we should have great Dependance on it in the small pox when of ye Confluent kind.
- I must here communicate a new Fact to you in Favour of the Peruvian Bark, when joined wth Tartar emetic in Fevers. Dr James's always gives ye Bark after he has procured a Remission by his Powder. in ye small pox therefore the Tart procures a Remission. so that the Bark given immediately

afterwards ~~also~~ rarely fails of success
- I w.d here observe that weak
Decoctions do no service. we must
always give it in powder, & in pretty
large Doses. — —
3.d the Application of Cold is another
valuable Remedy in y.e confluent
small pox. it acts by obviating
Irritation & Putrefaction.

I shall conclude by observing y.t
we are too apt to give y.e Bark w.th the
the view of promoting suppuration
when y.e pock are numerous. But
it may do Harm When y.e Force of

the system is not very weak. our chief Dependance must here be laid on the cold Air when this is the Case. —

I have nothing new to say of any of the Other Exanthemata. — what has been said of y^e^ Small-pox will apply to most of them.



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